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ATTORNEY DOCKET NO. CONFIRMATION N APPLICATION NO. FILING DATE FIRST NAMED INVENTOR 10541-1839 2129 10/687,385 10/16/2003 DeQuan Yu

07/20/2004

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EXAMINER MILLER, CARL STUART

ART UNIT PAPER NUMBER

3747

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	$\Lambda \Lambda \lambda$
	10/687,385	YU ET AL.	
	Examiner	Art Unit	
	Carl S. Miller	3747	
The MAILING DATE of this communication app			ddress
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a ly within the statutory minimum of thir will apply and will expire SIX (6) MONe, cause the application to become Al	reply be timely filed ty (30) days will be considered tim NTHS from the mailing date of this BANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on			
2a) This action is FINAL . 2b) ☐ This	s action is non-final.		
3) Since this application is in condition for allowa	nce except for formal mat	ters, prosecution as to the	ne merits is
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.E). 11, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-9</u> is/are pending in the application.		4 1 2	
4a) Of the above claim(s) is/are withdra	wn from consideration.	•	
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-9</u> is/are rejected.		e	
7) Claim(s) is/are objected to.		•	
8) Claim(s) are subject to restriction and/o	or election requirement.		
Application Papers		Α.	
9) The specification is objected to by the Examine	er.		
10)☐ The drawing(s) filed on is/are: a)☐ acc	cepted or b) objected to	by the Examiner.	
Applicant may not request that any objection to the	drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	•	•	• •
11) The oath or declaration is objected to by the Ex	xaminer. Note the attached	d Office Action or form F	PTO-152.
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. §	§ 119(a)-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:			
1. Certified copies of the priority document			
2. Certified copies of the priority document		• • • • • • • • • • • • • • • • • • • •	
 Copies of the certified copies of the prio application from the International Bureau 	•	received in this Nationa	ıı Stage
* See the attached detailed Office action for a list		received	
ded the attached detailed office action for a list	or the certified copies flot	roccivou.	
Attachment(s)	, □	O (DTO 110)	
1) ⊠ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) s)/Mail Date	
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of I	nformal Patent Application (PT	TO-152)

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, 6, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirata.

In particular, Hirata teaches finds a projected fuel demand in the form of a pump control output and then calculates an estimated fuel pressure. The estimated fuel pressure is used to set the opening time for the injectors (see column 5, lines 43-58). Also, it has been assumed that the substantially constant pressure claimed is meant to be constant at the set CPU pressure which is what Hirata achieves.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata.

In particular, since the pressure within the rail varies with fuel flow, then it would have been obvious to size the valve such that its response does not alter the variable output set by the CPU but merely reduces the pressure to avoid over pressures.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata in view of Gaskins.

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Hirata applies as noted above and Gaskins teaches the well known practice of using look-up tables to relate input and output data for use in controlling an electric fuel pump for a common rail, thus mating such structure obvious to use in Hirata.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In particular, the art shows other electric fuel pumps with variable flow outputs.

Any inquiry concerning this communication should be directed to Carl Miller at telephone number 308-2653.

Miller/DI

July 14, 2004.

Carl S. Miller